

SEQUENCE OF CONSTRUCTION

1. ALL EROSION AND SEDIMENT CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS. ONLY LIMITED DISTURBANCE IS PERMITTED TO PROVIDE ACCESS TO THE EROSION AND SEDIMENT CONTROL AREAS FOR GRADING AND ACQUIRING BORROW TO CONSTRUCT THOSE CONTROLS.
2. INSTALL ROCK CONSTRUCTION ENTRANCE AT SUNFLOWER WAY.
3. CONSTRUCT SEDIMENT BASINS 1, 2 & 3 WITH TEMPORARY SEDIMENT CONTROLS AND ROCK RIP-RAP PROTECTION, AND IMMEDIATELY SEED AND STABILIZE. CONSTRUCT STORM SEWER FROM EW 80A TO INLET 79, AND CONSTRUCT A BERM DOWNSTREAM OF INLET 79 TO CREATE SUMP CONDITION AT THE INLET. CONSTRUCT PERMANENT DIVERSION SWALE 4. CONSTRUCT STORM SEWER FROM EW 43 TO INLET 94, AND CONSTRUCT PERMANENT DIVERSION SWALE 7. CONSTRUCT PERMANENT DIVERSION SWALES 1 AND 2. THESE CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND CAPABLE OF HANDLING STORMWATER RUNOFF PRIOR TO EARTHMOVING ACTIVITIES UPSTREAM, OR STORMWATER BEING OUTLETTED TO THEM.
4. INSTALL TREE PROTECTION/ORANGE BARRIER FENCE AROUND WATERS OF THE UNITED STATES, TREES AND WOODED AREAS TO REMAIN. INSTALL FILTER FABRIC FENCE. CONSTRUCT STONE FILTER BERMS, AND THE ROADWAY DIVERSION BERM ON SUNFLOWER WAY.
5. SEE SEPTA LICENSE AGREEMENT PLANS FOR CONSTRUCTION SEQUENCE FOR SANITARY SEWER AND PINE ROAD IMPROVEMENTS THROUGH SEPTA PROPERTY.
6. CLEAR AND GRUB SITE.
7. STRIP TOPSOIL FROM PROPOSED ROADWAY, BUILDING, AND DRIVEWAY AREAS. REMOVE OR STOCKPILE TOPSOIL THERE INDICATED ON PLAN FOR USE WITH FINAL GRADING. INSTALL PERIMETER FILTER FABRIC FENCE AND IMMEDIATELY APPLY TEMPORARY SEEDING AND MULCHING TO THE STOCKPILES. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
8. ROUGH GRADE ROADWAY, BUILDING, DRIVEWAY AND PARKING AREAS TO THE PROPOSED SUB-GRAB ELEVATION AND GRADIENT. STABILIZE ANY SEVERE CUT AND FILL EMBANKMENT AREAS IMMEDIATELY UPON COMPLETION.
9. CONSTRUCT BUILDINGS, BUILDING CONSTRUCTION, SIDEWALK INSTALLATION, AND DRIVEWAY CONSTRUCTION SHALL PROCEED ON A LOT TO LOT BASIS. FINISH GRADE AND PERMANENTLY SEED LOT AREAS UPON COMPLETION OF BUILDING.
10. INSTALL SANITARY SEWERS AND MANHOLES, STORM SEWERS, INLETS, INLET FILTERS, AND PERMANENT ROCK ENERGY DISSIPATORS, AND REMAINING UNDERGROUND UTILITIES. STORM INLETS ARE TO BE PROTECTED WITH SILT SACK OR ROCK INLET PROTECTION ONLY IF THEY DO NOT DISCHARGE TO A SEDIMENT BASIN. SEE SEPTA LICENSE AGREEMENT PLANS FOR CONSTRUCTION SEQUENCE FOR SANITARY SEWER THROUGH SEPTA PROPERTY.
11. CONSTRUCT CURB AND CRUSHED STONE BASE COURSE FOR ROADWAYS.
12. CONSTRUCT BITUMINOUS BASE COURSE FOR ROADWAYS.
13. FINISH GRADE ALL REMAINING LAWN AND LANDSCAPE AREAS, AND RIGHT-OF-WAY AREAS AND PERMANENTLY SEED ALL REMAINING EXPOSED AREAS.
14. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT CONTROLS MUST BE REMOVED. THE STANDARD FOR A STABILIZED, EROSION RESISTANT, PERENNIAL VEGETATIVE COVER WILL BE A UNIFORM COVERAGE OR DENSITY OF 70% ACROSS THE DISTURBED AREA. CONVERT SEDIMENT BASINS 1 AND 2 TO PERMANENT BASINS. AFTER THEIR CONTRIBUTING DRAINAGE AREAS ARE STABILIZED AND THE STORM SEWER IS FLUSHED OF ACCUMULATED SEDIMENT, GRADE AND PERMANENTLY SEED REMAINING DISTURBED AREAS. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE SEED AND STABILIZED IMMEDIATELY.
15. FINISH PAVE ROADWAYS.

SOIL INFORMATION

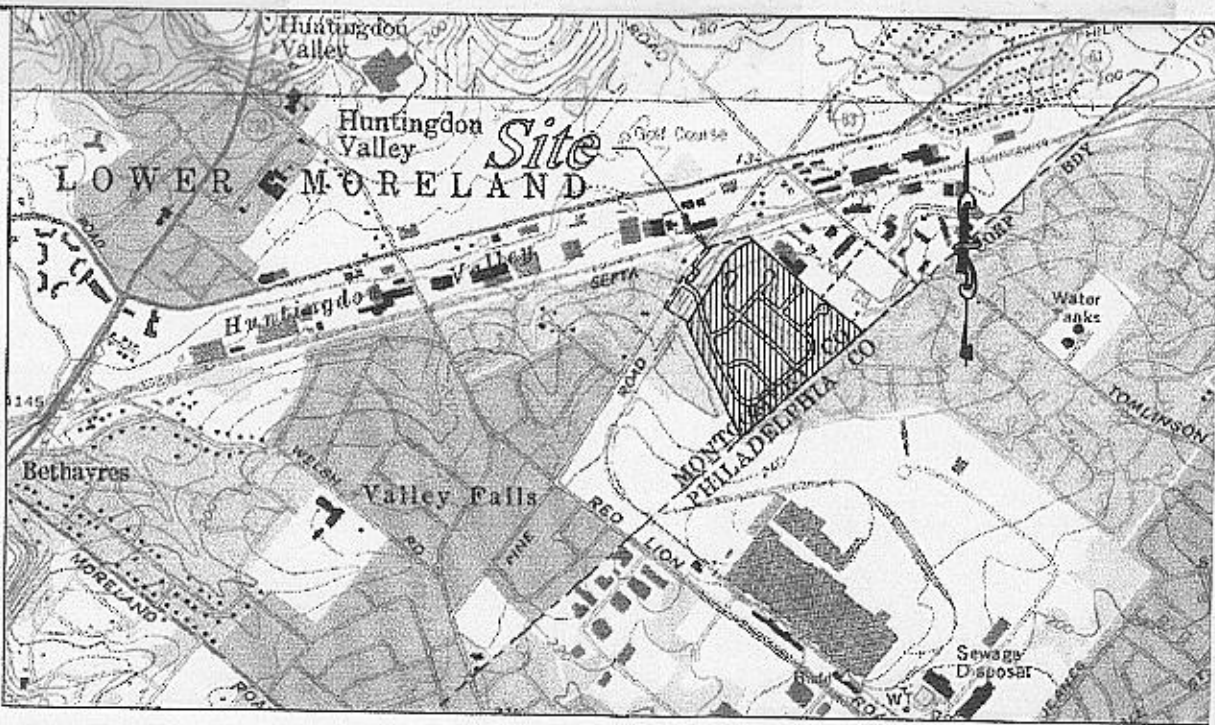
1. SOIL BOUNDARY LINES SHOWN WERE SCALED FROM MAPS PUBLISHED IN THE "SOIL SURVEY OF MONTGOMERY COUNTY, PENNSYLVANIA" DATED APRIL 1967 BY S.C.S. ("SURVEY").
2. APPROPRIATE EARTHWORK CONSTRUCTION TECHNIQUES, INCLUDING IMPORTING SUITABLE SOILS AND UTILIZING LOCAL HUMPS AND PUMPS (TO APPROVED SEDIMENT REMOVAL FACILITIES) TO KEEP EXCAVATIONS DRY, AS RECOMMENDED BY A QUALIFIED GEOTECHNICAL ENGINEER, SHOULD BE IMPLEMENTED IF SOIL LIMITATIONS ARE ENCOUNTERED. THE COUNTY CONSERVATION DISTRICT SHALL BE CONSULTED IF SUCH LIMITATIONS ARE ENCOUNTERED. THE SOIL INFORMATION LISTED BELOW IS FROM DATA TABLES IN "SURVEY".

SOIL LEGEND

MAP SYMBOL	MAPPING UNIT		
GnB2	GLENNVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED - TYPE "B"		
GnB2	GLENNVILLE SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED - TYPE "B"		
Hs	HATBORO SILT LOAM - TYPE "B"		
MdB	MADE LAND, SCHIST AND GNEISS MATERIALS, SLOPING - TYPE "C"		
MnB2	MAJOR CHANNERY SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED - TYPE "B"		
MAP SYMBOL	LIMITATIONS FOR TERRACES, DIVERSIONS, AND WATERWAYS	SUITABILITY FOR WINTER GRADING	SUITABILITY FOR TOP
GnB2	NONE	GOOD	GOOD
GnB2	NONE	GOOD	GOOD
Hs	NA DUE TO POSITION ON FLOOD PLAINS	POOR	POOR
MdB	DEPTH TO SUBSTRATUM AND BEDROCK VARIABLE; POOR PHYSICAL PROPERTIES	FAIR TO POOR	UNSATISFACTORY
MnB2	STEEP SLOPES; BEDROCK OUTCROPS; CONTAINS STONES; SOME AREAS MAY ERODE EASILY	FAIR	FAIR

GENERAL RESOLUTIONS FOR SOIL LIMITATIONS

SEASONAL HIGH WATER TABLE	UNDERDRAINS MAY BE REQUIRED
SEVERE SLOPE	ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO ECB ON SLOPES GREATER THAN 3:1
SHALLOW DEPTH TO BEDROCK	BLASTING MAY BE REQUIRED
UNSATURABLE FOR TERRACES	CONSULT QUALIFIED GEOTECHNICAL ENGINEER
UNSATURABLE FOR WINTER GRADING	CONSULT QUALIFIED GEOTECHNICAL ENGINEER
UNSATURABLE FOR TOPSOIL	EARTHWORKING ACTIVITIES MAY NEED TO BE SUSPENDED DURING FREEZING COLD WEATHER
UNSATURABLE FOR EMBANKMENTS	NOT TO BE USED AS TOPSOIL; IMPORT SUITABLE MATERIAL IF NECESSARY
	IMPORT SUITABLE MATERIAL AS NECESSARY; CONSULT QUALIFIED GEOTECHNICAL ENGINEER



SITE LOCATION MAP

SCALE: 1" = 2000'



Within dimensions shall have priority over scaled dimensions. All dimensions, elevations, locations, and conditions, shall be verified by the Contractor prior to construction, and the Owner and Boucher & James, Inc. shall be notified of any discrepancies with the information shown on drawings.

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CONSTRUCTION PHASE AND 10 WORKING
DAYS IN DESIGN STAGE - STOP CALL
Pennsylvania One Call System, Inc.

1-800-242-1776

0 40 80 120
Scale In Feet
1" = 40'

FINAL PLAN



12/28/01	REV. PER TWP ENGINEER'S 8/16/01 LTR. TWP PLANNERS' 8/20/01 LTR. TWP ATTORNEY DATED 8/16/01 LTR. AND SEPTA 12/16/01 LTR.
2/5/02	REV. PER TWP ENGINEER'S 1/2/02 LTR. TWP PLANNERS' 1/2/02 LTR. AND SEPTA 2/1/02 LTR.
4/01/02	REV. PER MCD LETTER DATED 4/03/01
04/30/02	FINAL PLAN REVISIONS
06/13/02	REV. PER MCD VERBAL COMMENTS 5/13/02
6/14/02	REV. PER TWP ENGINEER'S LETTER DATED 6/14/02, REVISED 6/20/02, TWP PLANNERS' LETTER DATED 6/14/02, AND MCD VERBAL COMMENTS
7/12/02	REV. PER MCD VERBAL COMMENTS 7/11/02
9/8/02	FINAL PLAN REVISIONS

Project : THE ESTATES AT HUNTINGDON VALLEY
LOWER MORELAND TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

Owner in Equity/ Applicant : HOVNANIAN PENNSYLVANIA, INC.
MAKFIELD EXECUTIVE QUARTERS
301 OXFORD VALLEY ROAD, SUITE 804
YARDBLEY, PENNSYLVANIA 19067
PHONE: (215)493-4230

Title EROSION & SEDIMENTATION CONTROL PLAN (1 of 4)

Boucher and James, Inc.
Consulting Engineers • Planners • Land Surveyors
Doylestown, PA. Quakertown, PA.

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Drawn by: RMM Checked by: JST Job No.: 99284 Scale: 1"=40' Date: September 1, 2000